



U.S. Department of Energy  
Emergency Support Function 12

Hurricane Ike Situation Report # 14

September 21, 2008 (10:00 AM EDT)

[http://www.oe.netl.doe.gov/emergency\\_sit\\_rpt.aspx](http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx)

Summary

Electricity		
Impacted State	Electric Customer Outages	% of State Out
Louisiana	10,862	1%
Kentucky	45,448	2%
Indiana	6,186	< 1%
Ohio	122,440	2%
Texas	891,623	8%
<b>TOTAL:</b>	<b>1,076,559</b>	
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,160,174	89.2%
Natural Gas Production Shut-in (mmcf/d)	5,576	75.4%
Refinery Capacity Shut down (b/d)	2,268,320	NA

Notes:

Total state customers are based on 2006 EIA Customer Data.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Source:

Crude Oil and Natural Gas Production Data from Minerals Management Service.

Refinery Status confirmed by company or on company web site and through various trade press sources.

\* % capacity out represents percent of production capacity in the Gulf of Mexico.

Highlights:

- As of 9:00 AM EDT September 21, there are an estimated 1,076,559 customers without power. The largest outages remain in Texas where 891,623 customers have no electricity service. Across all States affected by Ike, power has been restored to nearly 490,000 customers since Ike Situation Report No. 13 yesterday. Outages in heavily impacted Texas counties as reported by the Texas PUC as of 9:00 AM September 21 include:
  - Harris – 600,014
  - Galveston – 67,119
  - Jefferson – 44,401
  - Orange – 3,474
- As of 8:00 AM EDT September 21, vessels with drafts over 34 feet are limited to daylight transit only from Sims Bayou to the Houston ship channel turning basin. Vessels in the Sabine and Neches Rivers going into the Port Arthur area are limited to drafts of 36 feet in the day and 30 feet at night. Part of the Gulf Intracoastal Waterway (GIWW) in TX has re-opened, but it is still closed from mile marker 350 to 319 and has some closures in LA as well. There are some tow



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and horsepower restrictions from mile marker 253 to 319. The Calcasieu Channel is open to vessels with a draft of 39' or less. On September 19, a safety zone went into effect for the Lower Mississippi River above mile marker 191 to about mile marker 230 for vessels with a draft greater than 30 feet; they are limited to daylight hours only. Port of Pascagoula is still limiting tankers with drafts greater than 36 feet to occasional daylight transits.

- The U.S. Coast Guard has noted that there are a large number of oil and chemical spills along the coast from Houston, TX to Lake Charles, LA. The Coast Guard is working closely with State and Federal agencies to expedite clean-up efforts.

## ESF 12 Actions:

- ESF-12 is staffing the FEMA Region VI Joint Field Office (JFO) in Austin, TX, the Region V RRCC in Chicago, IL, and the National Response Coordination Center (NRCC) in Washington, DC. In addition, a petroleum expert has been deployed to San Antonio, TX to serve as part of FEMA's National Incident Management Assistance Team (IMAT) and an electricity expert has been deployed to join the Region IV IMAT in Houston, TX. The FEMA Region VI JFO in Baton Rouge, LA and the FEMA Region VI Regional Response Coordination Center in Austin, TX has been demobilized.

## Situation Report Detail

### Petroleum & Gas Information

Oil & Gas Offshore Production Shut In Status for Affected Area			
Location	Amount Shut In	Pre-event Production	% Shut In
Crude Oil (B/D)	1,160,174	1,300,000	89.2%
Natural Gas (MMCF/D)	5,576	7,400	75.4%

Source: Minerals Management Service

- As of September 19, the Minerals Management Service (MMS) reports 5,576 million cubic feet per day (MMcf/d) of the Gulf's natural gas production remains shut-in, equivalent to 75.4 percent of the Gulf production. MMS reports 1,160,174 barrels/day of the Gulf's crude production remains shut-in, equivalent to 89.2 percent of the Gulf's crude production. A total of 262 production platforms, or 36.5 percent of the Gulf's 717 manned platforms, remain evacuated. Personnel from 6 rigs, representing 5.0 percent of those operating in the region, remain evacuated. (MMS reported no updates over the weekend.)
- No changes have been reported on the status of the petroleum pipelines since Situation Report #12.
- Refineries report no change in status as of 9:00 AM EDT September 21. See Situation Report #13 for list of refineries. Nine refineries in Texas, with a total operable capacity of 2.3 million b/d, remain shut down due to Hurricane Ike.



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- There are 39 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.7 billion cubic feet per day (Bcf/d).<sup>1</sup> The Energy Information Administration (EIA) has confirmed that 8 plants remain shut down which includes those plants still impacted from Gustav, totaling an operating capacity of 5.08 Bcf/d (just under 30 percent of the capacity in Hurricane Ike's path). In addition, EIA reports 21 plants have resumed operations at reduced or normal levels with a total operating capacity of 7.95 Bcf/d. Nine plants are capable to restart (totaling 4.43 Bcf/d operating capacity) once power is restored and/or upstream gas flow are sufficient. The only change to the status of the natural gas processing plants from Situation Report #12 is the Larose plant reports that it is operating at reduced levels.
- Twenty six major natural gas pipelines in the Gulf Coast area continue to report complete shut-in or report that portions of their systems remain at reduced levels of gas flow due to Hurricane Ike. Damage assessments continue to be performed both on onshore and offshore facilities. See table below.
- As of 6:45 PM EDT September 20, Mississippi Canyon Gas Pipeline reports that all repairs to its system have been completed and the Force Majeure declared on August 30, 2008 has been lifted. The pipeline will begin to accept gas flow on its system starting today, September 21.



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**Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/21/08 8:00 AM EDT**

Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/19/08	ANR Southeast Area locations can now resume gas flow but not accepting liquids from these points. WC 167 the Interconnect with UTOS and HIOS is down until further notice. Pipeline is not accepting gas from Barracuda, Stingray and Johnson Bayou Plants.
Chandeleur Pipeline Co.	9/16/08	Operationally Scheduled Volumes indicates pipeline is flowing at 75% of pre hurricane levels.
Columbia Gulf Transmission	9/18/08	Flow from offshore points has been reduced to approximately 25% of normal operating capacity.
Destin Pipeline Co.	9/18/08	Pascagoula processing plant Force Majeure declared Sept. 15 now lifted and flows will resume to normal.
Discovery Gas Transmission	9/19/08	Larose processing plant fully operational. Offshore receipts remain unavailable pending assessments; Pipeline is accepting flow from: Tennessee Gas Pipeline and all Paradis Gas Gathering producers (PGGS), Tetco, Transco, Bridgeline and GulfSouth.
Enbridge (UTOS)	9/19/08	All UTOS facilities remain under Force Majeure and are currently down and all points are shut-in. Damage assessments are still underway.
Garden Banks Gas Pipeline	9/19/08	Assessment and repair continue. Garden Banks' pipeline facilities are essentially ready for return to service; availability of downstream outlets for gas and condensate will determine when pipeline operation will resume.
High Island Offshore System	9/18/08	Force Majeure from Sept 10 remains in effect - HIOS is currently securing equipment to locate a potential leak on its 42-inch line north of HIA-264. The equipment is expected to be on location in three (3) days.
KinderMorgan (Texas & Tejas)	9/20/08	All firm storage customers can resume injections at 100% of their firm injection rights. There is no interruptible space available at this time.
Manta Ray Offshore Gathering	9/19/08	Assessments continue on offshore platforms and facilities. A significant amount of repair work is expected to be completed by Sep 25, 2008. Partial service expected by Friday, Sept 26.
Mississippi Canyon Pipeline	9/20/08	Force Majeure is lifted. All repairs to the system have been completed and gas flow can resume Sept 21. Two points remain unavailable at this time (Tennessee Gas Pipeline & Venice Gas Plant).
Natural Gas Pipeline Co of America	9/20/08	Power at Compressor station 302 has been restored and station 346 is ready for service. Force Majeure still in effect but gas flow can resume on the LA line at restricted capacity. Compressor stations 342 and 343 remain shut down and not available for service.
Nautilus Pipeline Co.	9/19/08	Due to upstream restrictions and ongoing damage assessment at Burns Point, pipeline remains under Force Majeure. Nautilus is not accepting nominations at this time.
Sabine Pipe Line (Henry Hub)	9/18/08	Force Majeure has been lifted for some additional points along the system. Partial compression has been restored at the Henry Hub complex and the pipeline is closely monitoring its system.
Sea Robin Pipeline Co.	9/17/08	Sea Robin will begin accepting flow on Sep 22, 2008. The Hess Processing Plant will operate at a minimum volume of 150,000 Dth/d until at least Sep 24, 2008.
Southern Natural Gas Co.	9/20/08	Due to material delays, pipelines interconnected with Sabine Pipeline sustained damage and are projected to be available the evening of Sept 22. Gas flow is limited at this point until repairs are made.
Stingray Pipeline Co.	9/19/08	Some onshore facilities (office building) sustained water damage; offshore facilities have minor damage and crews are working to repair visual damage and will perform further inspections in the coming days. Crews are being flown into onshore facilities due to the hazardous road conditions. System repairs could take up to 2 weeks.
Tennessee Gas Pipeline	9/20/08	TGP has completed assessments of multiple facilities: Johnson Bayou Plant restart 9/24/2008, East Leg Bluewater restart 2weeks, Pecan Island Plant restart one month, and Compressor Station 25 partial restart 9/24/08. Tennessee estimates current supply loss at this time to be at approximately 0.9 Bcf.
Texas Eastern Transmission	9/19/08	TE estimates that producers have shut-in 400-500 MMcf/d of supply on its system. Investigations of TE's pipeline facilities, third party gas processing plants in Louisiana and offshore infrastructure are not complete. Until these investigations are complete, these facilities will remain shut-in.
Texas Gas Transmission	9/17/08	All systems on the pipeline are operational, but they are closely monitoring receipt points.
Transcontinental Gas Pipe Line	9/19/08	Supply impact at 700 MMcf/d that remains shut-in. Southwest, Central and Southeast, LA laterals of system remain at zero flow.
Trunkline Gas Pipeline	9/19/08	Declared Force Majeure event impacting gas flow deliveries on the ELA (East Louisiana). Flooding at Centerville Compressor Station limiting gas flow to Henry Hub. Pipeline integrity to Patterson has been confirmed and 11 receipt points have been cleared for flow.
Venice Gathering System	9/18/08	Remains shut-in from the effects of Gustav. Processing plant will not be available until first week in October – gas flow will remain at zero until plant is fully operational.
Dauphin Island Gathering	9/16/08	Force Majeure lifted as Mobile Bay (Duke) processing plant completed maintenance. System will resume normal operations.
Black Marlin Pipeline	9/15/08	Force Majeure declared Friday, Sept 12. - No gas flow being accepted.
Gulf South Pipeline	9/18/08	Critical Period has been lifted as of gas day Sept 18.
Northern Natural	9/16/08	Scheduled gas flow through portions of the Matagorda Offshore Pipeline System.



**Electricity Updates:**

**Texas:**

As of: 9/21/2008 9:00 AM EDT



<b>Electricity Outages: Utility Detail</b>			
<b>Texas</b>			
<b>Utility</b>	<b>Outages</b>	<b>Total Utility</b>	<b>% w/o Power</b>
SWEPCO	293	84,696	0.3%
Entergy Texas	84,885	397,451	21.4%
CenterPoint	736,562	2,076,978	35.5%
ONCOR	415	179,442	0.2%
TX New Mexico Power Co	26,140	113,370	23.1%
All Cooperatives	43,328	462,645	9.4%
<b>TOTAL</b>	<b>891,623</b>	<b>3,314,582</b>	

Total utility customers are based on TXPUC outage reports.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

- As of 9:00 AM EDT September 21, there are 891,623 customers reported without power in Texas. Over 312,000 customers have had power restored since Ike Situation Report No. 13.

**Additional State Reports:**

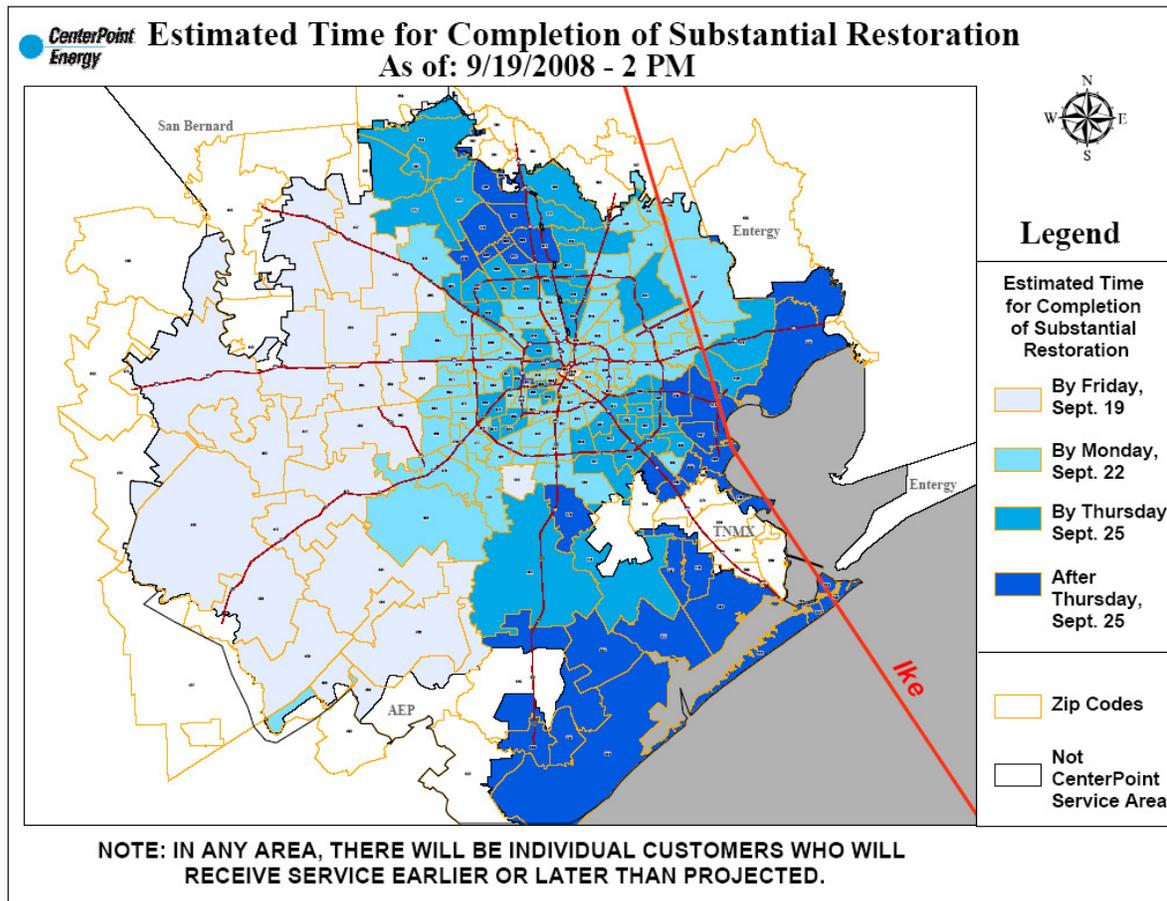
- In Louisiana, as of 6:00 AM EDT September 21 Entergy reports that power is restored from the affects of Ike to all customers who can receive power. About 3,000 customer outages remain due to Gustav in low lying areas which had been inaccessible due to flooding but restoration has now resumed. Restoration estimates are: Terrebonne Parish - essentially complete by September 27; Grand Isle and Lafitte areas of Jefferson Parish and Lafourche Parish - essentially complete by Oct. 1. CLECO reports its remaining 504 outages suffered flood damage. Entergy reports remaining Gustav damage in Louisiana includes 10 of 241 transmission lines and 6 of 354 substations out of service. Cooperative utilities reported a combined 7,358 customer outages as of September 18.
- In other States impacted by Ike, remaining outages as of 8:00 AM EDT September 21 include:
  - Ohio – 122,440 outages, 2 percent of total customers
  - Kentucky – 45,448 outages, 2 percent of total customers
  - Indiana – 6,186 outages, less than 1 percent of total customers

**Restoration Updates:**

- CenterPoint has restored power to over 1.1 million customers of the 2.1 million that lost power due to Ike. See map below for CenterPoint restoration estimates as of September 19:



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- CenterPoint reports that 8,000 mutual assistance crews plus 4,200 internal crews and contractors are involved in the restoration. **Entergy has approximately 14,000 crews restoring service.**
- Recent restoration updates from CenterPoint as of 6:00 PM EDT September 19 include:
  - 686 circuits have been restored out of the original 1,379 that were out.
  - 693 distribution circuits, out of a total of 1,492, are out.
  - In Galveston, all eight Seawall underground circuits are hot.
  - 89 transmission lines have been restored out of the original 94 that were out.
  - 5 transmission lines are out. 3 substations on Galveston Island are without transmission service.
  - Transmission line inspections are complete on those transmission circuits that were out as a result of the storm. There were no steel transmission towers, steel poles, or concrete poles destroyed during the storm.
- As of 3:00 PM EDT September 20, CenterPoint equipment outages include:
  - **Distribution circuits - 631 or 42 percent**
  - **Transmission circuits - 4, or 1 percent**
  - Power Transformers - 16, or 3 percent
  - **Auto Transformers - restored**



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- As of 6:00 AM EDT September 21, Entergy reports transmission and distribution outages caused by Ike include:
  - 84 of 237 transmission lines
  - 92 of 378 substations
  - 132 transmission structures destroyed, and 205 damaged; 6,426 poles; 2,664 transformers; 4,153 cross arms ; 5,355 service connections damaged or destroyed; and 9,368 spans of wire knocked down.
  
- In Texas, 16,806 customer outages remain inaccessible due to flooding. Entergy restoration estimates by area are:
  - September 21 - Orange, Vidor
  - September 22 - Navasota
  - September 23 - Port Arthur, Port Neches, Nederland, Groves
  - September 25 - Winnie, Anahuac, Dayton, Ames, Daisetta, Batson, Saratoga, The Woodlands
  - September 29 – Woodville, Silsbee, Lumberton, Kountze, Conroe, Huntsville, Madisonville
  - October 5 - New Caney, Cleveland
  - October 6 - Beaumont, Bevil Oaks, Sour Lake
  - Flooded – no date determined- Taylor Landing, Bolivar Peninsula, and Sabine Pass